We claim:

1. A method of predicting a risk of one or more future clinical outcomes for a subject suffering from a vascular disease, comprising:

determining the presence or amount of thrombus precursor protein in a sample from said subject; and

correlating the presence or amount of thrombus precursor protein to said risk of one or more clinical outcomes for the subject.

2. A method according to claim 1, wherein said vascular disease is selected from the group consisting of acute coronary syndrome, atherosclerosis, ischemic stroke, intracerebral hemorrhage, subarachnoid hemorrhage, transient ischemic attack, systolic dysfunction, diastolic dysfunction, aneurysm, aortic dissections, myocardial ischemia, angina pectoris, myocardial infarction, congestive heart failure, dilated congestive cardiomyopathy, hypertrophic cardiomyopathy, restrictive cardiomyopathy, cor pulmonale, arrhythmia, valvular heart disease, endocarditis, pulmonary embolism, venous thrombosis, and peripheral vascular disease.

3. A method according to claim 2, wherein said vascular disease is acute coronary syndrome.

4. A method according to claim 3, wherein said one or more future clinical outcomes are selected from the group consisting of death, nonfatal myocardial infarction, recurrent ischemia requiring rehospitalization, recurrent ischemia requiring urgent revascularization, and congestive heart failure.

5. A method according to claim 4, wherein the correlating step comprises determining the concentration of thrombus precursor protein in said sample, and comparing said concentration to a threshold concentration, wherein a concentration of thrombus precursor protein less than said threshold concentration is indicative of a first risk of said one or more clinical outcomes and a concentration of thrombus precursor protein greater than said threshold concentration is indicative of a second risk of one or more clinical outcomes.

6. A method according to claim 5, wherein said threshold concentration provides a ROC curve area of at least about 0.6.

7. A method according to claim 5, wherein said threshold concentration provides an odds ratio of about 4 or greater or about 0.25 or less.

8. A method according to claim 5, wherein said threshold concentration provides a hazard ratio of about 1.25 or greater or about 0.8 or less.

9. A method according to claim 5, wherein said threshold concentration is a median thrombus precursor protein concentration measured in samples from subjects suffering from acute coronary syndrome.

10. A method according to claim 9, wherein said median thrombus precursor protein concentration is about 8.9 μg/mL.

11. A method according to claim 1, further comprising determining the presence or amount of one or more other subject-derived markers in said sample, and said correlating step comprises correlating the presence or amount of thrombus precursor protein and said one or more other subject-derived markers to said risk of one or more clinical outcomes for the subject.

12. A method according to claim 11, wherein said one or more other subject-derived markers are independently selected from the group consisting of specific markers of myocardial injury, specific markers of neural tissue injury, markers related to blood pressure regulation, markers related to coagulation and hemostasis, markers related to inflammation, and markers related to apoptosis.

13. A method according to claim 12, wherein said one or more other subject-derived markers comprise one or more specific markers of myocardial injury.

14. A method according to claim 12, wherein said one or more other subject-derived markers comprise one or more specific markers of neural tissue injury.

15. A method according to claim 12, wherein said one or more other subject-derived markers comprise one or more markers related to blood pressure regulation.

16. A method according to claim 12, wherein said one or more other subject-derived markers comprise one or more markers related to coagulation and hemostasis.

17. A method according to claim 12, wherein said one or more other subject-derived markers comprise one or more markers related to apoptosis.

18. A method according to claim 12, wherein said one or more other subject-derived markers are selected from the group consisting of annexin V, B-type natriuretic peptide, β-enolase, free cardiac troponin I, complexed cardiac troponin I, free and complexed cardiac troponin I, free cardiac troponin T, complexed cardiac troponin T, free and complexed cardiac troponin T, creatine kinase-MB, glycogen phosphorylase-BB, heart-type fatty acid binding protein, phosphoglyceric acid mutase-MB, S-100ao, adenylate kinase, brain-derived neurotrophic factor, calbindin-D, creatine kinase-BB, glial fibrillary acidic protein, lactate dehydrogenase, myelin basic protein, neural cell adhesion molecule (NCAM), c-tau, neuropeptide Y, neuron-specific enolase, neurotrophin-3, proteolipid protein, S-100β, thrombomodulin, protein kinase C γ, atrial natriuretic peptide (ANP), pro-ANP, B-type natriuretic peptide (BNP), NT-pro BNP, pro-BNP C-type natriuretic peptide, urotensin II, arginine vasopressin, aldosterone, angiotensin I, angiotensin II, angiotensin III, bradykinin, calcitonin, procalcitonin, calcitonin gene related peptide, adrenomedullin, calcyphosine, endothelin-2, endothelin-3, renin, urodilatin, acute phase reactants, cell adhesion molecules, C-reactive protein, interleukins, interleukin-1 receptor agonist, monocyte chemoattractant protein-1, caspase-3, lipocalin-type prostaglandin D synthase, mast cell tryptase, eosinophil cationic protein, KL-6, haptoglobin, tumor necrosis factor α, tumor necrosis factor β, Fas ligand, soluble Fas (Apo-1), TRAIL, TWEAK, fibronectin, macrophage migration inhibitory factor (MIF), vascular endothelial growth factor (VEGF), myeloperoxidase, caspase-3, cathepsin D, α-spectrin, plasmin, fibrinogen, D-dimer, β-thromboglobulin, platelet factor 4, fibrinopeptide A, platelet-derived growth factor, prothrombin fragment 1+2, plasmin-α2-antiplasmin complex, thrombin-antithrombin III complex, P-selectin, thrombin, von Willebrand factor, and tissue factor, or markers related thereto.

19. A method according to claim 9, wherein said plurality of subject-derived markers comprise BNP or a marker related thereto.

20. A method according to claim 9, wherein said plurality of subject-derived markers comprise free cardiac troponin I, complexed cardiac troponin I, free and complexed cardiac troponin I, free cardiac troponin T, complexed cardiac troponin T, free and complexed cardiac troponin T, or a marker related thereto.

21. A method according to claim 12, wherein said plurality of subject-derived markers comprise C-reactive protein or a marker related thereto.

22. A method according to claim 12, wherein said plurality of subject-derived markers comprise caspase-3 or a marker related thereto.

23. A method according to claim 12, wherein said plurality of subject-derived markers comprise myeloperoxidase or a marker related thereto.

24. A method according to claim 1, wherein the sample is from a human.

25. A method according to claim 1, wherein the sample is selected from the group consisting of blood, serum, and plasma.

26. A method according to claim 1, wherein the assay method is an immunoassay method.

27. A method according to claim 12, wherein the correlating step comprises determining the concentration of thrombus precursor protein and said one or more other subject-derived markers, and individually comparing each concentration to a corresponding threshold level.

28. A method according to claim 12, wherein the correlating step comprises determining the concentration of thrombus precursor protein and said one or more other subject-derived markers, calculating a single index value based on each concentration, and comparing the index value to a threshold level.

29. A method according to claim 1, wherein the method comprises determining a temporal change in thrombus precursor protein concentration, and wherein said temporal change is used in said correlating step.

30. A device for performing the method of claim 12, comprising a plurality of discrete locations, each discrete location configured and arranged to immobilize for detection thrombus precursor protein or one of said one or more other subject-derived markers.

31. The device of claim 30, wherein each of said plurality of discrete spots comprises an antibody that binds thrombus precursor protein or one of said one or more other subject-derived markers.

32. A method of diagnosing atherosclerosis in a subject, comprising:

determining the presence or amount of monocyte chemoattractant protein-1 or a marker related thereto in a sample from said subject; and

correlating the presence or amount of monocyte chemoattractant protein-1 to the presence or absence of atherosclerosis in the subject.

33. A method according to claim 32, wherein the correlating step comprises determining the concentration of monocyte chemoattractant protein-1 or a marker related thereto in said sample, and comparing said concentration to a threshold concentration, wherein a concentration of monocyte chemoattractant protein-1 or a marker related thereto less than said threshold concentration is indicative of a first risk of atherosclerosis and a concentration of monocyte chemoattractant protein-1 or a marker related thereto greater than said threshold concentration is indicative of a second risk of atherosclerosis.

34. A method according to claim 32, wherein said correlating step further comprises determining the presence or amount of one or more risk factors selected from the group consisting of the sex, age, a diagnosis of diabetes, a diagnosis of hypertension, past tobacco use, a cholesterol concentration, and a family history of atherosclerosis, for said subject, wherein the presence or absence of one or more of said risk factors and the presence or amount of monocyte chemoattractant protein-1 or a marker related thereto are correlated to the presence or absence of atherosclerosis in the subject.

35. A method according to claim 33, wherein said threshold concentration provides an odds ratio of about 1.3 or greater or about 0.77 or less.

36. A method according to claim 33, wherein said threshold concentration is selected to provide an odds ratio of about 2 or greater or about 0.5 or less.

37. A method according to claim 33, wherein said median thrombus precursor protein concentration is greater than about 120 pg/mL.

38. A method according to claim 33, wherein said median thrombus precursor protein concentration is greater than about 150 pg/mL.

39. A method according to claim 33, wherein said median thrombus precursor protein concentration is greater than about 200 pg/mL.

40. A method according to claim 32, further comprising determining the presence or amount of one or more other subject-derived markers in said sample, and said correlating step comprises correlating the presence or amount of monocyte chemoattractant protein-1 or a marker related thereto and said one or more other subject-derived markers to the presence or absence of atherosclerosis in the subject.

41. A method according to claim 40, wherein said one or more other subject-derived markers are independently selected from the group consisting of specific markers of myocardial injury, specific markers of neural tissue injury, markers related to blood pressure regulation, markers related to coagulation and hemostasis, markers related to inflammation, and markers related to apoptosis.

42. A method according to claim 32, wherein the sample is from a human.

43. A method according to claim 32, wherein the sample is selected from the group consisting of blood, serum, and plasma.

44. A method according to claim 32, wherein the assay method is an immunoassay method.